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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,879	12/11/2006	Roberto Defilippi	33033-1090	3660

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EXAMINER

COLEMAN, KEITH A

ART UNIT	PAPER NUMBER
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3747

MAIL DATE	DELIVERY MODE
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12/18/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,879	Applicant(s) DEFILIPPI, ROBERTO	
	Examiner KEITH COLEMAN	Art Unit 3747	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/16/2009 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

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the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-4 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bennett (US Patent No. 6,216,675) in view of Brummer et al. (US Patent No. 5,445,130) and Watanabe et al. (US Patent No. 5,251,603).

With regards to claim 1, the patent to Bennett discloses a cooling device (28, Col. 3, Line 29, Col. 1, Lines 14-16, See Figure 1) for a fuel-recirculation circuit (Col. 3, Lines 28-32) from the injection system (14, Col. 2, Line 60, See Figure 1) to the tank (18, Col. 3, Line 12, See Figure 1) of a motor vehicle, which has a first opening and a second opening for connection to said recirculation circuit and comprises a pipe (28, See Figure 1) having a side wall (154, Col. 4, Line 28, See Figure 5) and a finned radiant body (32, Col. 3, Line 31) in a relationship of heat exchange with said pipe (28), end couplings (28, See Figure 1) connected hermetically to said pipe (28), an elongated body (28) housed in a through cavity (enclosed by fins 34, Col. 3, Line 32, See Figure 2) defined by said pipe (28), projections (32,34) radially interposed between said pipe (28) and said elongated body (28) to define internal passages traversed by said fuel, in that said projections (32, 34) are integrally formed on at least one of said pipe (28) and said

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elongated body (28), and in that said end couplings (See Figure 1) are connected to said pipe (28) only except positively disclosing the elongated body is made of polymeric material and is interference fitted in said through cavity. As to the polymeric material, the patent to Brummer et al. discloses an elongated body is made of polymeric material.

As to the new limitation of "in that said pipe is made of a metal material having a different coefficient of thermal expansion than the polymeric material," since Bennett explicitly states that "other changes may be made in detail, especially in matters of shape, size, arrangement of the parts, order of steps or material of components within the principles of the invention", it would have been obvious to a person of ordinary skill in the art at the time the invention was made to substitute the material of the elongated body of Bennett with a polymeric material in view of the teaching to Brummer et al., in order to have a material that is resistant to fuel and heat. Furthermore, as the interference fit, the patent to Watanabe et al. discloses an elongated body (36) is interference fitted in a cavity (See Figure 6). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the elongated body of Bennett and Brummer with wherein the elongated body (36) is interference fitted in a cavity in view of the teaching to Watanabe, in order to prevent temperature rise of gasoline or fuel in the fuel tank or a motor vehicle (Col. 1, Lines 6-8). See MPEP 2144.07. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious)

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As to the limitation of “having at least a tapered end longitudinally spaced from said couplings”, the patent to Watanbe clearly shows the claimed limitation in Figure 5. With regards to the conical shaped connectors instead of tapered connectors, the patent to Bennett discloses a conically shaped connector (138) as addressed in claim 11. Since Applicant has not provided a reason or benefit to modify a tapered end with a conical end and the prior art clearly shows using a conical end as evidenced by Bennett, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the tapered ends of Bennett with conically shaped end because the modification is invariably design choice. In re Seid , 161 F.2d 229, 73 USPQ 431 (CCPA 1947) (Claim was directed to an advertising display device comprising a bottle and a hollow member in the shape of a human figure from the waist up which was adapted to fit over and cover the neck of the bottle, wherein the hollow member and the bottle together give the impression of a human body. Appellant argued that certain limitations in the upper part of the body, including the arrangement of the arms, were not taught by the prior art. The court found that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art.).

With regards to claim 2, the patent to Bennett discloses said radiant body (10) comprises a plurality of fins that are longitudinal with respect to said pipe (See Figure 2).

With regards to claim 3, the patent to Bennett discloses said longitudinal fins are arranged in spoke-like fashion with respect to said pipe (See Figure 2).

With regards to claim 4, the patent to Bennett discloses said elongated body (10) is coaxial to said pipe (24, See Figure 1).

With regards to claims 6 and 7, the patent to Bennett discloses said elongated body carries said projections in contact with said side wall of said pipe (24), thus defining said internal passages (See Figure 2).

With regards to claim 8, the patent to Bennett discloses said elongated body (10) has a circular cross section (See Figure 2).

With regards to claim 9, the combination of Bennett, Watanabe et al., and Brummer et al. discloses all the limitations of the claimed subject matter including Watanabe et al. discloses that the projections are helical.

With regards to claim 10 the patent to Bennett discloses characterized in that said projections are longitudinal (See Figures 1 and 2).

With regards to claim 11, the patent to Bennett discloses said at least one coupling comprises a substantially conical portion (138) housing a respective end (See Figures 1 and 2).

Response to Arguments

2. Applicant's arguments filed 9/16/2009 have been fully considered but they are not persuasive.

Applicant's Arguments

Claims 1-4 and 6-11 are pending in the application.

Claims 1-4 and 6-11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,216,675 to Bennett ("Bennett") in view of U.S. Patent No. 5,445,130 to Brummer et al. ("Brummer") and U.S. Patent No. 5,251,603 to Watanabe et al. ("Watanabe"). This rejection is respectfully traversed as follows.

[1]It is believed that the combination of Bennett, Brummer and Watanabe does not teach or suggest all of the elements of independent claim 1. Applicant respectfully submits that Bennett does not teach or suggest an elongated body that has at least one conical end portion longitudinally spaced from end couplings connected to the pipe. In addition, Bennett is not understood to teach or suggest that the end couplings have a substantially conical shape. Brummer and Watanabe fail to make up for the deficiencies

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of Bennett. Neither Brummer nor Watanabe discloses an elongated body that has at least one conical end portion longitudinally spaced from end couplings connected to the pipe or that the end couplings have a substantially conical shape. For at least these reasons, it is respectfully submitted that independent claim 1 and the claims that depend therefrom are patentable over Bennett in view of Brunnner and Watanabe.

Applicant notes that the Office Action dated April 23, 2009 expressly referenced the conical structure recited in independent claim 1. See April 23, 2009 Office Action at 8 ("the specificity found in Applicant's specification particularly the sectional finned structure and the conical structure with member 11, 12 and 17 are not found in the claim language").

Examiner's Response to Arguments

Applicant contends that the prior art does not reasonably teach a conical shaped end. However, as discussed previously, the patent to Bennett clearly discloses a conical end 138. Examiner can't find in Applicant's specification the benefit of having a conical end as opposed to a tapered end.

Conclusion

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3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davies et al. (US Patent No. 6,536,516) shows the current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEITH COLEMAN whose telephone number is (571)270-3516. The examiner can normally be reached on 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Cronin can be reached on (571)272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KAC
/K. C./
Examiner, Art Unit 3747

/Stephen K. Cronin/
Supervisory Patent Examiner, Art Unit 3747